

REMARKS


Applicant hereby elects Group II, claims 28-29 for further evaluation on the merits. Applicant notes that claims 1 and 30-33 have been cancelled without prejudice or disclaimer, preserving the right to pursue those claims in a divisional application. Applicant has amended claims 2-27, making them ultimately dependent upon claim 28.

Applicants do not understand the Examiner's conclusion that the product of claim 28 can be made by another materially different composition, when claim 28 specifically required the composition of claim 1. Applicants nonetheless, acknowledge the Examiner's conclusion that claims 28 and 29 are directed to a product, i.e., "a component of equipment for use in molten metals which include magnesium", and therefore observe that the Examiner has given suitable weight to this limitation. Moreover, the article formed of the alloy is a separate invention. Given this conclusion by the Examiner, Applicants wish to proceed with Group II.

If any fee is due in conjunction with the filing of this amendment, Applicants authorize deduction of that fee from Deposit Account No. 06-0308.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this AMENDMENT is being deposited with the United States Postal Service as FIRST CLASS MAIL in envelope addressed to: Asst. Commissioner of Patents and Trademarks, Washington, D.C. 20231, on July 2, 2001.

By: 

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

2. The [alloy of claim 1], component of claim 28 wherein the carbon is at a concentration [is] of 0.4 to 2.0 weight %.
3. The [alloy] component of claim 2, wherein the carbon is at a concentration [is] of 0.5-0.6 weight%.
4. The [alloy of claim 1] component of claim 28, wherein the boron is at a concentration of 0.15 to 0.50 weight%.
5. The [alloy] component of claim 4, wherein the boron is at a concentration [is] of 0.20 - 0.30 weight%.
6. The [alloy of claim 1] component of claim 28, wherein the sulphur is at a concentration of less than about 0.005 weight %.
7. The [alloy of claim 1] component of claim 28, wherein the phosphorous is at a concentration of less than about 0.005 weight %.
8. The [alloy of claim 1] component of claim 28, wherein the chromium is at a concentration of 9 to 12 weight %.
9. The [alloy] component of claim 8, wherein the chromium concentration is 10 to 11 weight %.
10. The [alloy of claim 1] component of claim 28, wherein the alloy further includes silicon at a concentration of less than about 1.0 weight %.
11. The [alloy] component of claim 10, wherein the silicon concentration is less than about 0.8 weight %.
12. The [alloy of claim 1] component of claim 28, wherein the molybdenum is at a concentration of 5.0 to 8.0 weight %.

13. The [alloy] component of claim 12, wherein the molybdenum concentration is 6.0 to 7.0 weight %.

14. The [alloy of claim 1] component of claim 28, wherein the tungsten is at a concentration of 2.5 to 4.0 weight %.

15. The [alloy] component of claim [16] 14, wherein the tungsten concentration is 3.0 to 3.5 weight %.

16. The [alloy of claim 1] component of claim 28, wherein the vanadium is at a concentration of 1.5 to 3.0 weight %.

17. The [alloy] component of claim 16, wherein the vanadium is at a concentration of 2.00 to 2.40 weight %.

18. The [alloy of claim 1] component of claim 28, wherein the niobium is at a concentration of 2.0 to 4.0 weight %.

19. The [alloy] component of claim 18, wherein the niobium concentration is 2.80 to 3.20 weight %.

20. The [alloy of claim 1] component of claim 28, wherein the cobalt is at a concentration of 3.0 to 5.0 weight %.

21. The [alloy] component of claim 20, wherein the cobalt concentration is 4.00 to 4.50 weight %.

22. The [alloy of claim 1] component of claim 28, further including tantalum at concentration of less than about 1.5 weight %.

23. The [alloy of claim 1] component of claim 28, further including manganese at a concentration of about 0.5-1.0%.

24. The [alloy of claim 1] component of claim 28, wherein the alloy is substantially free of nickel.

25. The [alloy] component of claim 24, wherein the alloy includes less than about 0.005 weight % nickel.

26. The composition of claim 28, wherein the alloy includes, in terms of weight percent:

Boron	0.01 - 2.0
Carbon	0.01 - 2.0
Sulphur	0.00 - 0.005
Phosphorous	0.00 - 0.005
Chromium	5.0 - 15.0
Silicon	0.0 - 2.0
Molybdenum	2.0 - 12.00
Tungsten	0.5 - 10.00
Vanadium	0.5 - 5.0
Niobium	0.5 - 5.0
Cobalt	0.5 - 10.0

27. The [alloy] component of claim 26, wherein the alloy includes, in terms of weight percent:

Boron	0.20 - 0.30
Carbon	0.50 - 0.60
Chromium	10.0 - 11.0
Silicon	0.0 - 0.80
Molybdenum	6.0 - 7.0
Tungsten	3.00 - 3.50
Vanadium	2.00 - 2.40
Niobium	2.00 - 2.40
Cobalt	4.00 - 4.5

28. A component of equipment for use in molten melts which include magnesium, the component formed from [the] an alloy [of claim 1] comprising iron, chromium, molybdenum, vanadium, niobium, cobalt, and tungsten, and at least one of boron and carbon, the alloy being substantially free of sulfur and phosphorous.